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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,197	11/26/2001	Thomas Reisinger	GR 99 P 1915	8423
24131	7590	12/21/2005	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			KIM, KEVIN	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/994,197	<b>Applicant(s)</b> REISINGER ET AL.	
	<b>Examiner</b> Kevin Y. Kim	<b>Art Unit</b> 2638	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Claims 1 and 11 have been amended such that the previously recited “an oscillating circuit” is now “an oscillating crystal.” Furthermore, applicant argues that the cited prior art fails to teach “a detunable oscillator crystal” recited in claims 12 and 16. Based on this amendment, applicant traverses the rejection of the claims. A new prior art search has been conducted based on Applicant’s amendments/arguments and a new ground(s) of rejection is made in view of a US patent to Bourzeix (US 6,393,071), as set forth below.

### ***Claim Rejections – 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1,2,10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay (US 5,983,112 previously cited) in view of Bourzeix (US 6,393,071).

Claims 1, 2, 11, 12, 13, 16 and 17.

Kay discloses a radio communication system and method, comprising the steps of repeatedly transmitting a message in different time slots, where second and third transmissions are implemented on different carrier frequencies. See col.2, lines 54-65. The different frequencies are changed only within one single transmission channel. See col.1, lines 48-50. The preamble reciting a use in “a radio access control system” is not given patentable weight since it merely calls for a field of use. Likewise, the content of the transmission as being “access code” is a matter of design choice depending on the field of use. Kay fails to elaborate on how

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different carrier frequencies are generated as opposed to the use of capacitors and an (detunable) oscillating crystal specifically called for in the claims.

Referring to Fig. 2, Bourzeix teaches at least one capacitor (50) and an oscillating crystal or a detunable oscillator (44,48) to generate a plurality of frequencies, where switches are used to connect one of the capacitor to an oscillator. See col. 3, lines 1-10. Thus, it would have been obvious to one skilled in the art at the time the invention was made to use a bank of capacitors which is switchably coupled to an oscillator crystal, as taught by Bourzeix, to generate different carrier frequencies required in Kay's radio communication.

Regarding 10, Kay discloses all the subject matter claimed but is silent on a tolerance range of carrier frequencies, it would have been obvious to one skilled in the art at the time the invention was made to set the tolerance of the carrier frequencies of Kay reasonably low, i.e., "not more than  $\pm 10\%$ " because it is a well established engineering principle to have a low tolerance in order to provide stable carriers.

Regarding claims 14 and 18 further calling for the switch to be "a program-controlled switch," since the different frequencies should be generated regularly in Kay's device for repeated transmission of a message, the switches of Bourzeix, once used in Kay's device would have been programmed to select a different capacitor one at a time.

Regarding claims 15 and 19, Kay teaches using a plurality of frequencies, as explained above, implying that a frequency selecting circuit, i.e., "a carrier frequency control device" as claimed, would have been connected to the bank of capacitors, as taught by Bourzeix, for the purpose of switching one of them to the oscillating crystal.

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4. Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay in view of Bourzeix, as applied to claim 1 above, and in view of Shanbhag (US 6,314,125, previously cited).

Claims 3 and 6.

Kay in combination with Bourzeix discloses all the subject matter claimed except for “applying spreading to the data message by a predefined spread sequence.” Shanbhag teaches that spreading data message is well known in the art for combining, transmitting and separation of message signals, i.e., an efficient utilization of frequencies without interference. Thus, it would have been obvious to one skilled in the art at the time the invention was made to apply a spreading code to the message of Kay for the purpose of separating message signals without interference from other signals transmitted on the same frequencies.

Claims 4,5,7 and 8.

Kay in combination with Bourzeix discloses all the subject matter claimed, as explained above in connection with claim 3, but is silent on specific carrier frequencies or data rates. Thus, it can not be ascertained whether or not the difference between the carrier frequencies is in an order of magnitude of a data rate of the data message as claimed in claim 4 or in a range between one quarter and two times a data rate of the data message as claimed in claim 5. However, since a selection of particular carrier frequencies and data rate of the data is a matter of design choice, it would have been obvious to one skilled in the art at the time the invention was made to select carrier frequencies and data rata that have the claimed relation between them particularly because applicant have failed to disclosed such relationship between carrier frequencies and data rate solves any stated problems or is for any particular purposes.

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***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shigemori (US 5,204,975) teaches capacitors coupled to an oscillator for generating a plurality of different frequencies. See Fig.4 and its description.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KEVIN KIM  
PATENT EXAMINER

/K. Kim 12/17/05